

**CODE: 1807  
FLSA: EXEMPT  
GRADE: 19**

**TOWN OF VIENNA, VIRGINIA  
JOB DESCRIPTION**

**JOB TITLE: CIVIL ENGINEER I  
ADMINISTRATION DIVISION  
PUBLIC WORKS DEPARTMENT**

**GENERAL STATEMENT OF JOB**

Under limited supervision, performs professional, supervisory, and technical work in support of the planning and direction of the daily operations of the Administration Division of the Public Works Department. Work involves reviewing construction and engineering plans; inspecting residential and commercial construction projects for compliance with codes, regulations, and Town standards while dealing with consultants and developers regarding plan approval and inspection problems; preparing and administering Town contracts; answering citizens' inquiries and resolution of citizen's complaints; and representing the department as directed before Council, Boards, Commissions, and citizen groups. Reports to the Director of Public Works.

**SPECIFIC DUTIES AND RESPONSIBILITIES**

**ESSENTIAL JOB FUNCTIONS**

Coordinates Public Works and public utilities' activities with other divisions and agencies; approves projects including detailed plans and specifications for improvements; reviews and analyzes plans and specifications for construction of public facilities.

Represents the department as directed before Council, Boards, Commissions, and citizen groups.

Performs difficult or highly technical design or review of site or subdivision plans.

Supervises work performed under contract; maintains professional control of projects to completion.

Supervises, plans, and coordinates a large consultant engineering support staff performing diverse technical and managerial work.

Receives and responds to citizen inquiries and complaints; establishes priorities.

Reviews detailed construction plans, grading permits, site plans, subdivision plans, sketches, and specifications for conformance to the applicable codes.

Prepares structural and civil design drawings, technical specifications, and construction cost estimates of projects; reviews all subdivision plat revisions concerning access, street location, site distance, and traffic safety.

## **CIVIL ENGINEER I**

Inspects construction sites for compliance with approved sediment and erosion control plans to prevent adverse impact to water resources, vegetation, and other landscaping; ensures conformance with standards and compliance with Town codes and State law; reviews and approves permits to ensure compliance with Town code and State law, requirements, and legal standards.

Conducts field inspections at projects; solves problems arising during construction phase.

Works on a daily basis with contractors, property owners, and developers to secure compliance with approved plans, permits, and inspections for within the right of way.

Conducts on-site inspections of commercial and residential construction projects for conformance with approved plans and Town standards and specifications.

Gathers information in the field or from records from which decisions are made as for how to correct disputes or problems with utilities, construction projects, or improvement projects within the Town's right of way.

Recommends solutions and alternative to technical problems arising during study and design phase.

Performs site review for public facilities, construction, analysis of various engineering studies and reports.

Establishes and maintains effective working relationships with Town officials, other public officials, associates, contractors, and the general public.

Attends projects and administrative meetings and conferences; makes recommendations concerning budget issues.

Performs traffic and transportation related responsibilities.

Assists with the management and prioritization of the Town's infrastructure.

Prepares review evaluations; coordinates design and plan modifications with construction site supervisors.

Performs routine and special site inspections to ensure ongoing compliance with approved plans and code provisions and accepted design standards.

Provides guidance, technical assistance, code interpretation, and problem solving through field inspections; performs administrative tasks related to engineering drawings and site inspections, documenting findings, and writing reports on construction activity.

Determines requirements for permit and plan submission; reviews and updates standards and forms.

Receives inquiries regarding the status of a plan review by telephone and/or in person; furnishes the requested information; refers to proper person for handling.

Advises public utility crews in the restoration of roadway, grading, easements, vegetation, and public right-of-ways.

## **CIVIL ENGINEER I**

Drafts engineering documents and plans for various Town improvements and installations.

Reviews site plans for compliance with codes and construction specifications.

Reviews plans, specifications, and fees for approval prior to the issuance of occupancy, street cut, building, land disturbing, and other permits.

Serves as the Department of Public Works staff to the Transportation Safety Commission.

Receives and/or reviews various records and reports such as incoming information from citizens, information from agencies, request from Council and Mayor, building permits/plans, drainage complaint forms/construction complaints, request for bond refunds, requests for technical information, and application for residential/commercial occupancy.

Prepares and/or processes various records and reports such as answers to citizens, reports to Mayor and Council, reports to regulatory agencies, review comments of permit applications, work orders, response letters, Notice to Comply, and stop work orders.

Refers to file documents, plans, statements from citizens, Town code, engineering manuals, International Building Code, Virginia Erosion and Sediment Control Handbook, Manual on Uniform Traffic Control Devices, International Plumbing Code, etc.

Operates a vehicle and a variety of equipment such as calculator, scale, telephone, level, computer, scanner, printer, camera, radio, cell phone, plotter, etc.

Uses a variety of tools such as measuring tape, fax machine, etc.; a variety of supplies such as digital media, paper, writing instruments, file cabinets, files, spray paint, general office supplies, etc.; and a variety of computer software such as Microsoft Word, Microsoft Excel, GIS, Print Shop Pro, etc.

Interacts and communicates with various groups and individuals such as the Director of Public Works, developers, contractors, Administrative staff, engineers, government officials, and the general public.

### **ADDITIONAL JOB FUNCTIONS**

Prepares construction drawings based on survey notes, field, and records research, and engineering calculations.

Prepares and maintains appropriate records, files, and reports.

Prepares annual recycling report.

Performs general administrative/office duties as required, including typing reports and correspondence, entering and retrieving computer data, copying and filing documents, sending and receiving faxes, answering the telephone, establishing and maintaining filing systems, etc.

Performs related duties as required.

## **CIVIL ENGINEER I**

### **MINIMUM TRAINING AND EXPERIENCE**

Requires a Bachelor's degree in civil engineering or related field and three to five years of progressively responsible administrative and technical experience in civil engineering, or an equivalent combination of education, training and experience that provides the required knowledge, skills and abilities. Must have certification as Erosion and Sediment Control Inspector and Plan Reviewer with one year of hire. Must have successfully completed required courses and certification; may be required to possess additional certification(s) as deemed necessary by the Town. Must possess a valid State driver's license.

### **MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS**

**Physical Requirements:** Must be physically able to operate a computer, telephone, drafting equipment, etc. Must be able to exert up to twenty pounds of force occasionally and/or a negligible amount of force frequently or constantly to lift, carry, push, pull or otherwise move objects. Physical demands are in excess of those for sedentary work; work involves sitting, standing and walking, stooping, kneeling, crouching, pushing, pulling and lifting/carrying weights of up to fifty pounds. Works outdoors in all weather conditions.

**Data Conception:** Requires the ability to compare and/or judge the readily observable functional, structural or compositional characteristics (whether similar to or divergent from obvious standards) of data, people or things.

**Interpersonal Communications:** Requires the ability of speaking and/or signaling people to convey or exchange information. Includes giving assignments and/or directions to subordinates and receiving direction from supervisor.

**Language Ability:** Requires ability to read a variety of codes of law, technical reports and surveys, computer manuals, engineering drawings, etc. Requires the ability to prepare complex reports, reviews, proposals, documents, etc., with proper format, punctuation, spelling, and grammar, using all parts of speech. Requires the ability to speak with and before others with poise, voice control, and confidence.

**Intelligence:** Requires the ability to apply principles of logical thinking to define problems, collect data, establish facts and draw valid conclusions; to deal with several abstract and concrete variables. Requires the ability to learn and understand complex principles and techniques; to make independent judgments in absence of supervision; to acquire knowledge of topics related to primary occupation. Must have the ability to comprehend and interpret received information and to understand and implement basic office machinery functions.

**Verbal Aptitude:** Requires the ability to record and deliver information, to explain procedures, to follow and give verbal and written instructions; to counsel and teach employees. Must be able to communicate effectively and efficiently with persons of varying educational and cultural backgrounds and in a variety of technical and/or professional languages including civil engineering, legal, budgeting, etc.

**Numerical Aptitude:** Requires the ability to add and subtract totals, to multiply and divide, to utilize mathematical formulas, to determine percentages and decimals and to determine time. Must be able to use advanced applications of algebra, geometry, trigonometry and calculus.

## **CIVIL ENGINEER I**

**Form/Spatial Aptitude:** Requires the ability to inspect items for proper length, width, and shape, and visually read various information.

**Motor Coordination:** Requires the ability to coordinate hands and eyes using office machinery and professional tools and instruments.

**Manual Dexterity:** Requires the ability to handle a variety of items, keyboards, office equipment, control knobs, buttons, switches, catches, tools, etc. Must have moderate levels of eye/hand/foot coordination.

**Color Discrimination and Visual Acuity:** Requires the ability to differentiate colors and shades of color; requires the visual acuity to determine depth perception, peripheral vision, inspection for small parts; preparing and analyzing written or computer data, etc.

**Interpersonal Temperament:** Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing under stress when confronted with emergency situations or tight deadlines. The worker may be subject to danger or risk to a slight degree and to tension as a regular, consistent part of the job.

**Physical Communications:** Requires the ability to talk and hear: (talking: expressing or exchanging ideas by means of spoken words; hearing: perceiving nature of sounds by ear).

## **PERFORMANCE INDICATORS**

**Knowledge of Job:** Has thorough knowledge of the methods, procedures and policies of the Administration Division of the Public Works Department as they pertain to the performance of duties of the Civil Engineer I. Has thorough knowledge of the laws, ordinances, standards and regulations pertaining to the specific duties and responsibilities of the position. Is able to maintain knowledge of legal and technical issues affecting department operations. Is able to ensure compliance with all laws and regulations and control the activities. Has extensive knowledge of civil engineering theories and practices as applied to construction, hydrology and hydraulics, and water and sewer utilities engineering. Has extensive knowledge of the materials and equipment used in construction and renovation. Has extensive knowledge of the various permits required by local, State, and Federal agencies for construction and operation. Is able to provide technical expertise in the development of engineering designs, specifications, cost estimates, and project plans. Is able to make sound, educated decisions. Is able to take the initiative to complete the duties of the position without the need of direct supervision. Is able to plan and develop daily, short- and long-term goals related to department purposes. Is able to plan, organize, and prioritize daily assignments and work activities. Has knowledge of how to apply supervisory and managerial concepts and principles; has knowledge of administrative principles involved in developing, directing and supervising various programs and related activities. Is able to train, assist, motivate, and provide leadership to a diverse group of employees. Is able to offer instruction and advice to subordinates regarding departmental policies, methods, and regulations. Is able to perform evaluations and to make recommendations based on results. Is able to plan and coordinate the most effective use of personnel, facilities, and resources to achieve department goals. Is able to read and interpret complex materials pertaining to the responsibilities of the job. Is able to assemble and analyze information and make written reports and records in a concise, clear, and effective manner. Has the mathematical ability to handle required calculations. Is able to compile, organize, and utilize various financial information necessary in the preparation of the project budget, and knows how to monitor the budget. Has knowledge of modern office practices, equipment, and technology. Has knowledge of the use of computers for data and word

## CIVIL ENGINEER I

processing. Has knowledge of how to maintain effective relationships with consumers, government personnel, professionals and members of the public through contact and cooperation. Is able to negotiate among different constituency groups with diverse interests to achieve a shared understanding and commonality of purpose. Is able to work effectively under political and public scrutiny and pressure as required. Is able to communicate professionally in confrontational situations. Has knowledge of how to make public presentations. Has comprehensive knowledge of the terminology and various professional languages used within the agency. Has knowledge of how to react calmly and quickly in emergency situations. Is able to learn and utilize new skills and information to improve job performance and efficiency.

**Quality of Work:** Maintains high standards of accuracy in exercising duties and responsibilities. Exercises immediate remedial action to correct any quality deficiencies that occur in areas of responsibility. Maintains high quality communication and interaction with internal and external entities with whom the position interacts.

**Quantity of Work:** Performs described Essential Functions and related assignments efficiently and effectively in order to produce quantity of work which consistently meets established standards and expectations.

**Dependability:** Assumes responsibility for completing assigned work. Completes assigned work within deadlines in accordance with directives, policy, standards and prescribed procedures. Maintains accountability for assigned responsibilities in the technical, human and conceptual areas.

**Attendance:** Attends and remains at work regularly and adheres to policies and procedures regarding absenteeism and tardiness. Provides adequate notice to higher management with respect to vacation time and leave requests.

**Initiative and Enthusiasm:** Maintains an enthusiastic, self-reliant and self-starting approach to meet job responsibilities and accountabilities. Strives to anticipate work to be accomplished, and initiates proper and acceptable action for the completion of work with a minimum of supervision and instruction.

**Judgment:** Exercises analytical judgment in areas of responsibility. Identifies issues or situations as they occur and specifies decision objectives. Identifies or assists in identifying alternative solutions to issues or situations. Implements decisions in accordance with prescribed and effective policies and procedures and with a minimum of errors. Seeks expert or experienced advice where appropriate and researches issues, situations and alternatives before exercising judgment.

**Cooperation:** Accepts supervisory instruction and direction and strives to meet the goals and objectives of same. Questions such instruction and direction when clarification of results or consequences are justified, i.e., poor communications, variance with established policies or procedures, etc. Offers suggestions and recommendations to encourage and improve cooperation intra- and inter-departmentally.

**Relationships with Others:** Shares knowledge with managers, supervisors and co-workers for mutual benefit. Contributes to maintaining high morale among all employees. Develops and maintains cooperative and courteous relationships inter- and intra-departmentally, and with external entities with whom the position interacts. Tactfully and effectively handles requests, suggestions and complaints in order to establish and maintain good will. Emphasizes the importance of maintaining a positive image.

## **CIVIL ENGINEER I**

**Coordination of Work:** Plans and organizes daily work routine. Establishes priorities for the completion of work in accordance with sound time-management methodology. Avoids duplication of effort. Estimates expected time of completion of work elements and establishes a personal schedule accordingly. Attends required meetings, planning sessions and discussions on time. Implements work activity in accordance with priorities and estimated schedules.

**Safety and Housekeeping:** Adheres to all established safety and housekeeping standards. Ensures such standards are not violated.

**DISCLAIMER:** This job description is not an employment agreement or contract. Management has the exclusive right to alter this job description at any time without notice.